# CAN/ULC 112.1:2025

# Standard for Leakage Rated Dampers for Use in Smoke Control Systems

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CETTE NORME NATIONALE DU CANADA EST DISPONIBLE EN VERSIONS FRANÇAISE ET ANGLAISE

Standard for Leakage Rated Dampers for Use in Smoke Control Systems, CAN/ULC 112.1

Third Edition, Dated December 22, 2025

***Summary of Topics***

***This new Third Edition of CAN/ULC 112.1 dated December 22, 2025 incorporates editorial changes including renumbering and reformatting to align with current style, in addition to the following changes:***

- ***Applicability of Referenced Standard NFPA 90A; 6.4***

- ***Referenced Publications Update; Section 2***

- ***Glossary Update; 3.1, 3.2***

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated March 28, 2025, July 15, 2025, and September 11, 2025.

**PLEASE NOTE THAT CERTAIN CODES MAY REFER TO A SUPERSEDED VERSION OF THIS STANDARD. IN THOSE INSTANCES, THE RELEVANT VERSIONS ARE AVAILABLE FOR PURCHASE.**

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CAN/ULC 112.1:2025

# Standard For Leakage Rated Dampers For Use In Smoke Control Systems

ICS 13.040; 13.220.30; 23.060; 91.140.30

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**THIRD EDITION . . . . . DECEMBER 22, 2025**

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ULC Standards

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## PREFACE

This is the Third Edition of CAN/ULC 112.1, Standard for Leakage Rated Dampers for Use in Smoke Control Systems.

This Edition of the Standard has been formally approved by the ULC Standards Committee on Fire Tests.

This Standard has been developed in compliance with the requirements of SCC for accreditation of a Standards Development Organization.

Only metric SI units of measurement are used in this Standard. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

This Third Edition National Standard of Canada is based on, and now supersedes, the Second Edition.

Attention is drawn to the possibility that some of the elements of this Canadian standard may be the subject of patent rights. ULC Standards shall not be held responsible for identifying any or all such patent rights.

Requests for interpretation of this Standard should be sent to ULC Standards. The requests should be worded in such a manner as to permit a “yes” or “no” answer based on the literal text of the requirement concerned.

This CAN/ULC 112.1 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of SCC for accreditation of a Standards Development Organization. In the event that no revisions are issued for a period of four years from the date of publication, action to revise, reaffirm, or withdraw the standard shall be initiated.

Comments or proposals for revisions on any part of the Standard may be submitted at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

This Standard is intended to be used for conformity assessment.

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## INTRODUCTION

### 1 Scope

1.1 These requirements cover dampers intended for use in heating, ventilating and air conditioning (HVAC) systems.

1.2 Leakage-rated dampers (smoke dampers) are intended to restrict the spread of smoke in HVAC systems that are designed to control the movement of smoke within a building when the HVAC system is operational in engineered smoke control systems.

1.3 Combination Fire and Smoke Dampers are intended to restrict the spread of smoke in HVAC systems that are designed to control the movement of smoke within a building when the HVAC system is operational in engineered smoke control systems, and provide a barrier to passage of flame and hot gases. Combination Fire and Smoke Dampers shall meet the requirements of ULC-S112-10, Standard Method of Fire Test of Fire Damper Assemblies and this Standard (see Table 1.1).

**Table 1.1**
**Various Damper Tests**

| Test | Section | Leakage-rated dampers | Combination fire and smoke leakage dampers |
|---|---|---|---|
| Fire-Endurance and Hose-Stream | 10 | – | X |
| Cycling | 11 | X | X |
| Salt-Spray Exposure | 12 | X | X |
| Spring Closing Force | 13 | – | X |
| Dynamic Closure | 14 | – | X |
| Duct Impact | 15 | – | X |
| Hydrostatic (Actuators) | 16 | X | X |
| Temperature Degradation | 17 | X | X |
| Leakage | 18 | X | X |
| Operation | 19 | X | X |
| Mutiple Assembly | 20 | X | X |
| Accelerated Aging (Gaskets) | 21 | X | X |
| Rigidity | 22 | X | X |

### 2 Referenced Publications

2.1 Any undated reference to a code or standard appearing in the requirements of this Standard shall be interpreted as referring to the latest edition of that code or standard.

2.2 The following publications are referenced in this Standard:

AMCA Standard 500-D-98, *Laboratory Methods for Testing Dampers for Rating*

ASTM A313/A313M-02 (R2003), *Standard Specification for Stainless Steel Spring Wire*

ASTM A653/A653M-06 REVA, *Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process*

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